

Trade and Industrial Education

School Year _____

Course: Principles of Machining and Manufacturing**Course Code # 5782**

Term: ___ Fall ___ Spring

2 Credits

Student:	Grade:
Teacher:	School:
Number of Competencies in Course: 21	
Number of Competencies Mastered:	
Percent of Competencies Mastered:	

STANDARD 1.0: Students will demonstrate personal management skills.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
1.1	Manage time and resources.			
1.2	Cultivate positive personal attitudes.			

STANDARD 2.0: Students will demonstrate teamwork, problem solving, and decision-making skills required for success in manufacturing-related careers.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
2.1	Cultivate teamwork abilities within a diverse group.			
2.2	Demonstrate problem solving and decision making abilities.			

STANDARD 3.0: Students will demonstrate safe practices and injury prevention and treatment in a manufacturing environment.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
3.1	Use reference materials to locate safety guidelines and regulations.			
3.2	Analyze safety hazards and prevention procedures for the manufacturing industry.			
3.3	Perform first aid in manufacturing situations.			
3.4	Pass with 100 % accuracy a written examination relating to safety issues.			
3.5	Pass with 100% accuracy a performance examination relating to safety.			
3.6	Maintain a portfolio record of written safety examinations and equipment examinations for which the student has passed an operational checkout by the instructor.			

STANDARD 4.0: Students will make and interpret measurements commonly required in manufacturing processes.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
4.1	Use common measurement tools to perform measurements to appropriate standards of accuracy and precision.			
4.2	Interpret measurements encountered in the manufacturing workplace.			

STANDARD 5.0: Students will implement quality and statistical process control procedures to ensure and improve quality in manufacturing processes.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
5.1	Analyze the contributing factors to an industrial process.			
5.2	Use statistical process control concepts to evaluate and modify manufacturing processes.			

STANDARD 6.0: Students will demonstrate the appropriate use of technologies used in machining and manufacturing processes.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
6.1	Investigate the chemical and physical properties of materials used in manufacturing.			
6.2	Demonstrate the steps involved in bench layout processes for milling, cutting, welding, and machining operations.			
6.3	Demonstrate basic proficiency in common manufacturing machining operations.			

STANDARD 7.0: Students will demonstrate leadership, citizenship, and teamwork skills required for success in the school, community, and workplace.

Learning Expectations		Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
7.1	Demonstrate dignity in work.			
7.2	Participate in SkillsUSA-VICA as an integral part of classroom instruction.			
7.3	Evaluate school, community, and workplace situations by applying problem-solving and decision-making skills.			
7.4	Demonstrate the ability to work professionally with others.			

Additional Comments _____